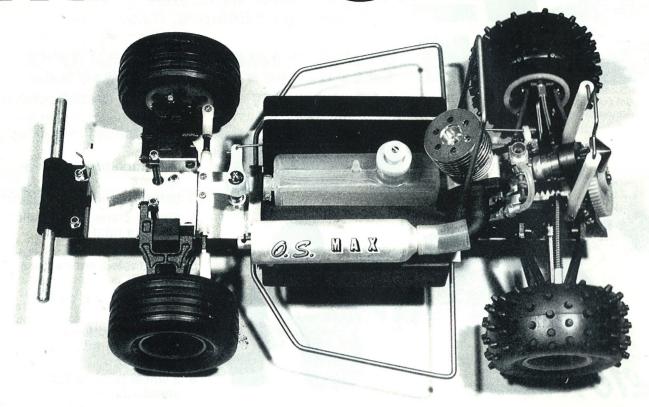
MANTUA Nevada De Luxe



John Varley reviews the Off Road Challenge from Mantua

When Jack Williams lost the agency for SG Cars, it did not take long to fill the gap this left. Mantua produce a high quality range of 1/4 th kits and into our possesion has arrived the off-road Nevada de Luxe for our appraisal.

We will therefore cut short any early preamble, and get straight into the box.

The chassis is produced from aircraft alloy, it is a one piece affair, ready drilled and countersunk for all mounting screws, to allow a flat, clear, underside to the car. Printed parts lists come in four languages, but there are no problems here, because the written lists are accompanied by equal amounts of pic-torial views, both exploded and assembled of all sections.

Each section is encased in plastic bags, and numbered 1 to 16. I would recommend that the builder does not open one pack, until he has assembled the previous section and attached it to the chassis. Each numbered pictorial view in the assembly instructions, relates to an individual pack of similarly numbered parts.

MOTOR MOUNT, DIFF and BRAKE ASSEMBLY:-

Two aluminium motor support blocks are attached to the chassis, and bolted to the outside of each block are nylon bearing blocks which support the dif-ferential. The right hand block incorporates on its top edge, a moulded bracket that positions the brake actuating cam. This cam passes through the bracket and locates and rotates in a hole, ready drilled and reamed in the

Two hardened pins already pressed into the bearing block, locate the metal brake pads behind the cam. The differential comes ready assembled, but for

Above: Instructions show a number of different motors installed. Here the OS 21 is shown — Note this picture is of the basic version.

Below: Rear View showing suspension detail and main drive gear.



pens to the internal parts, there is also an exploded view of the differential.

ped between the brake pads, and the dif-

those who show a keeness for what hap-The floating fibre brake disc is dropferential outer case is located in its bore.

To finalise this part of the assembly the driving nylon bevel gear, moulded onto its shaft, is located in its support block between roller bearings, mated up with the nylon bevel on the differential and screwed into place betwen the bearing blocks.

FRONT SUSPENSION and STEERING:-

The front suspension, follows a very neat, but effective traditional independent layout.

A moulded suspension mounting block is bolted to the chassis, onto which is bolted the right and left hand



Front suspension detail. This is the deluxe version with front coil over shockers.

Top and bottom wishbones, king pins, steering arms and stub axles are simply assembled using hardened steel pivot pins and circlips to retain them all.

As with the rear of the car, the bearings for the front stub axles are hardened steel, but roller bearings are offered as an optional extra.

To complete the front suspension, as with the rear, a kit of ready to assemble parts is supplied for coil springs over oil filled shocks. This shock absorber is designed and adjusted albeit on a smaller scale, to those on the rear of the

Servo saver comes ready assembled, and requires one slotted countersunk machine screw to attach it to the chassis. Steering arms could be improved with rose joints. Central hexagon turnbuckles allow easy adjustment of steering linkage, for your own choice of steering toe-in.

REAR SUSPENSION:-

Rear suspension is by swinging arm. A three part assembly, comprising two suspension arms, and half shaft support block make up each side. In our case, the bearings in each block are hardened steel, but according to the instructions, roller bearings can be supplied.

Shown in the instructions, is a simple coil spring shock absorber, but this deluxe version sports a pair of adjustable coil springs over oil filled dampers.

Full instructions for assembling the

shock absorbers is given separately with its pack of parts. Once done, the suspension arms are attached to the moulded privots on the bearing blocks, and the shock absorbers slotted into place along with their coil springs.

The tension in the springs can be simply adjusted by moving a circlip into one of three annular grooves machined into the shock absorber body.

Hardened pins are fitted into the ball end of the differential dirve shafts. The

cup end of the half shaft mate-up with the ball to produce a simple but effective universal joint. The shaft is held in position by circlips, either side of the half-shaft support block bearings.

Rear hubs are positioned by flats on the half shaft, and then retained in position by a circlip.

CENTRE SECTION:-

The entire radio tray comes in one injection moulding, which is bolted direct to the chassis, via two countersunk screw with nylok nuts.

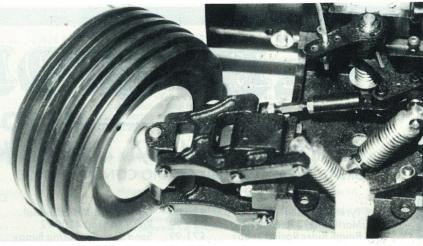
A right and left hand pannier, complete with their moulded lids, accommodate on one side the two servos, and on the other, receiver and radio

The centre of this tray, takes the fuel tank, held in place each end by two small moulded clamps and self tapping screws.

In the case of this kit, the tank was supplied with a simple press-on top, but a flip-top assembly is obtainable and would be the best bet if the car was driven regularly.
Other ancilliary parts added at this

stage, are the front bumper, consisting of 10mm steel bar moulded into a very strong, flexible rubber mount. Front and rear body posts, roll over bar, and side nerf bars.

Semi pneumatic moulded rubber tyres, knobbly to the rear and annular grooved to the front are fitted and we have ourselves, the completed rolling



Front Suspension

ENGINE INSTALLATION:—

For this kit we decided to install the new version of the side exhaust X21 Super Tigre car engine which included a slide carburettor. This engine, marketed at the very comptitive price of £45.07 is obtained from Tigre Engines of Watford. Not having any metric thread taps, I was forced to use 5BA socket cap

screws to hold down the engine. The motor mounting blocks do not come with any pre-tapped holes, this being left to the purchaser.

With the engine in position, the flywheel and clutch assembly are attached. The small diameter flywheel is produced from brass and comes complete with steel location pegs, that locate both steel clutch shoes, and steel clutch springs. The clutch bell is attached by circlip, leaving only the conical engine spinner to be attached by socket set screw via a machined flat on the end of the crankshaft extention, holding the clutch assembly.

The radio used to complete the kit, was the Sanwa FM 2 channel that was outlined in a review in issue 15 of Radio Race Car. The servos proved a little tall and necessitated some modification to the top of one radio box. Supplied with the kit are partly shaped rods for actuating steering and throttle linkages. Some careful bending, a few steel collars, plus overide springs and all is ready to run. We are supplied with an ABS holiday buggy type body, some careful cutting and a flourish with the old graffiti arm and a tin of cellulose spray and everything is complete.

PERFORMANCE:-

The Super Tigre was easily fired up and set a little on the rich side (it is always best with a new motor) and off it went. The performance is excellent — the wide wheel-base giving good stability with the diff allowing the steering response so necessary on this type of vehicle. We first ran the Nevada at a local village fete as part of a demo with a number of other off road gas powered cars taking part. It soon became very apparent that the dampers and diff that come as standard in the D/L kit are very desirable and its superior handling compared with the other cars not equiped with these refinements was very evident.

In conclusion, I didn't really like the rather thin ABS bodyshell and wasn't sure about the alloy chassis, but this is just probably a personal preference for fibre glass. Far outweighing these, I did like the general layout, the nice mouldings and excellent instructions and as stated previously I would go for the De Luxe version with its differential and shockers. Now for the important bit how much? The Nevada Cross D/L costs £83.95 which must make it one of the best value kits around and should ensure that we will see a lot of the Nevada Cross in future.

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